

63.02
21.98
49

25 PSI @ 13 GPM
 MINIMUM OPERATING PSI
 RESIDUAL PRESSURE
 SETTING AT OUTLET OF PRV

A-14

LINES 54 & 55
 ARE THE 2"
 PVC MAIN
 LINE UNDER
 THE STREET
 PROVIDED BY
 THE CIVIL
 ENGINEER ON
 THE WATER
 IMPROVE-
 MENT PLANS.

COMMENTS:

IRRIGATION FRICTION LOSS CALCULATION

WATER RIGHT DESIGN

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PROJECT	WOOD RANCH	PROJECT NO.	MJS-016	
LOCATION	SIMI VALLEY, CA.	DATE	7/29/16	
METER SYSTEM	A	CALCULATION BY	RWM	
SERVICE LINE	METER	CHECKED BY	RWM	
METER ELEV.	838	ZONE	A-14	
HGL (top)	1065	AVAILABLE PSI:	<input type="checkbox"/> HIGH GPM	
HGL (middle)	1050	<input checked="" type="radio"/> 0 - 1/2 TANK	<input checked="" type="checkbox"/> HIGH ELEVATION	
HGL (bottom)	1035	<input type="radio"/> 1/3 - 2/3 TANK	<input type="checkbox"/> FURTHEST	
AVAILABLE PSI	85 -- 92	(PREFERRED)	CONSERVATIVE ▼	LATERAL SIZING

#	SIZE	COMPONENT	GPM	DISTANCE	PSI LOSS
1		TORO DL2000	RGP-418	Minimum Pressure	25.00
2			ADV		

3	3/4"	<input type="radio"/> sch 40 <input type="radio"/> cl 315 <input checked="" type="radio"/> cl 200	PVC lateral line	5.06	13	0.18
4	3/4"	<input type="radio"/> sch 40 <input type="radio"/> cl 315 <input checked="" type="radio"/> cl 200		5.90	32	0.55
5	1"	<input type="radio"/> sch 40 <input type="radio"/> cl 315 <input checked="" type="radio"/> cl 200		6.52	22	0.14
6	1"	<input type="radio"/> sch 40 <input type="radio"/> cl 315 <input checked="" type="radio"/> cl 200		7.14	18	0.14
7	1"	<input type="radio"/> sch 40 <input type="radio"/> cl 315 <input checked="" type="radio"/> cl 200		8.87	5	0.07
8	1"	<input type="radio"/> sch 40 <input type="radio"/> cl 315 <input checked="" type="radio"/> cl 200		13.21	5	0.15
9		<input type="radio"/> sch 40 <input type="radio"/> cl 315 <input type="radio"/> cl 200				
10		<input type="radio"/> sch 40 <input type="radio"/> cl 315 <input type="radio"/> cl 200				
11		<input type="radio"/> sch 40 <input type="radio"/> cl 315 <input type="radio"/> cl 200				
12		<input type="radio"/> sch 40 <input type="radio"/> cl 315 <input type="radio"/> cl 200				
13		<input type="radio"/> sch 40 <input type="radio"/> cl 315 <input type="radio"/> cl 200				
14		<input type="radio"/> sch 40 <input type="radio"/> cl 315 <input type="radio"/> cl 200				
15		<input type="radio"/> sch 40 <input type="radio"/> cl 315 <input type="radio"/> cl 200				
16		<input type="radio"/> sch 40 <input type="radio"/> cl 315 <input type="radio"/> cl 200				
17		<input type="radio"/> sch 40 <input type="radio"/> cl 315 <input type="radio"/> cl 200				
18		<input type="radio"/> sch 40 <input type="radio"/> cl 315 <input type="radio"/> cl 200				
19		<input type="radio"/> sch 40 <input type="radio"/> cl 315 <input type="radio"/> cl 200				
20		<input type="radio"/> sch 40 <input type="radio"/> cl 315 <input type="radio"/> cl 200				
21		<input type="radio"/> sch 40 <input type="radio"/> cl 315 <input type="radio"/> cl 200				
22		<input type="radio"/> sch 40 <input type="radio"/> cl 315 <input type="radio"/> cl 200				
23		<input type="radio"/> sch 40 <input type="radio"/> cl 315 <input type="radio"/> cl 200				
24		<input type="radio"/> sch 40 <input type="radio"/> cl 315 <input type="radio"/> cl 200				
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26		<input type="radio"/> sch 40 <input type="radio"/> cl 315 <input type="radio"/> cl 200				
27		<input type="radio"/> sch 40 <input type="radio"/> cl 315 <input type="radio"/> cl 200				
28		<input type="radio"/> sch 40 <input type="radio"/> cl 315 <input type="radio"/> cl 200				
29		<input type="radio"/> sch 40 <input type="radio"/> cl 315 <input type="radio"/> cl 200				
30		<input type="radio"/> sch 40 <input type="radio"/> cl 315 <input type="radio"/> cl 200				
31		<input type="radio"/> sch 40 <input type="radio"/> cl 315 <input type="radio"/> cl 200				
32		<input type="radio"/> sch 40 <input type="radio"/> cl 315 <input type="radio"/> cl 200				
33		<input type="radio"/> sch 40 <input type="radio"/> cl 315 <input type="radio"/> cl 200				

A-14

#	SIZE	COMPONENT	GPM	DISTANCE	PSI LOSS
34		<input type="radio"/> sch 40 <input type="radio"/> cl 315 <input type="radio"/> cl 200			
35		<input type="radio"/> sch 40 <input type="radio"/> cl 315 <input type="radio"/> cl 200			
36		<input type="radio"/> sch 40 <input type="radio"/> cl 315 <input type="radio"/> cl 200			
37		<input type="radio"/> sch 40 <input type="radio"/> cl 315 <input type="radio"/> cl 200			
38		<input type="radio"/> sch 40 <input type="radio"/> cl 315 <input type="radio"/> cl 200			
39		<input type="radio"/> sch 40 <input type="radio"/> cl 315 <input type="radio"/> cl 200			
40		<input type="radio"/> sch 40 <input type="radio"/> cl 315 <input type="radio"/> cl 200			
41		<input type="radio"/> sch 40 <input type="radio"/> cl 315 <input type="radio"/> cl 200			
42		<input type="radio"/> sch 40 <input type="radio"/> cl 315 <input type="radio"/> cl 200			
43		TOTAL LENGTH OF LATERAL		95	

44		TOTAL LATERAL LINE LOSS	(includes 12 feet equivalent lengths of pipe for fittings)		1.23
45			AVB	13	
46	3/4"	SENNINGER PMR-MF	pressure regulator	13	5.00
47	1"	TORO T-ALFD10150-L	filter	13	2.50
48			min. PRS differential		
49	1"	RAIN BIRD PESB	control valve	13	2.13
50		Elevation of Highest Head on Zone	861		0.87
51		TOTAL LOSS (HEAD thru VALVE)			36.73

52	1 1/2"	SCH. 40 PVC	main line piping	13	40	0.19
53	1 1/2"	SCH. 40 PVC	main line fittings	13	68	0.33
54	2"	CL. 315 PVC	main line piping	13	400	0.64
55	2"	SCH. 40 PVC	main line fittings	13	42	0.06
56						
57						
58						
59						
60						
61						
62		TOTAL MAIN LINE IN CALC.			550	

63		TOTAL MAIN LINE LOSS				1.22
64		Elevation of Remote Control Valve	859			9.09

65	1"	CREATIVE SENSOR TECH.	flow sensor	13		0.06
66			PRV	13		0.00
67	1 1/2"	GRISWOLD 2230	master valve	13		1.00
68	1 1/2"	BRASS PIPE	pipe	13	11	0.07
69	1 1/2"	Febco 825YA	B.P.	13		11.30
70		Febco 650A	strainer / filter	13		0.10
71	1 1/2"	BRASS PIPE	pipe	13	11	0.07
72	2"	<input checked="" type="radio"/> std. AWWA <input type="radio"/> actual	water meter	13		0.30
73	2"	COPPER type K	service line	13	40	0.08

METER MODEL:

74		TOTAL PSI LOSS				60.02
75		contingency	5%			3.00
76		MINIMUM OPERATING PSI		13		63.02
77		less PRV back to POC				13.57
78		SETTING AT OUTLET OF PRV		13		49
79		RESIDUAL PRESSURE				21.98